

Kevin Sutton MZA 600 - 108<sup>th</sup> Ave. NE, Suite 108 Bellevue, WA 98004

# SUBJECT: Critical Areas Study - Stream Delineation and Buffer Reduction for: Paek Residence – 2215 80<sup>th</sup> Ave. SE, Mercer Island, WA Parcel 545230-2145

Dear Kevin:

On October 30, 2018 I conducted an initial wetland and stream reconnaissance on the subject property utilizing the methodology outlined in the May 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).* The site is currently entirely developed with an existing single-family residence and associated maintained yard.

Although no wetlands or streams were identified on the property during the site review, one stream (Stream 1) was observed draining from south to north off-site to the west. The ordinary high water (OHW) of this stream was delineated on January 3, 2019 and subsequently surveyed.

#### **1.0 EXISTING CRITICAL AREAS**

Stream 1 is located within a well-defined historically ditched channel that drains north into a culvert along the south property line of Parcel 531510-1680. The stream was dry during the October 30<sup>th</sup> site review and conveys only intermittent or seasonal flows.

Vegetation within the riparian corridor of the stream consists of maintained lawn to the edge of the west property line on the site. Vegetation within the off-site portion of the riparian corridor consisted primarily of dense Himalayan blackberry (*Rubus armeniacus*), snowberry (*Symphoricarpos albus*), and English ivy (*Hedera helix*), with scattered Lombardy poplar trees.

Kevin Sutton January 28, 2019 Page 2

Since Stream 1 does not contain fish habitat and conveys only seasonal or intermittent flows, it meets the criteria for a Type 3 watercourse per MICC 19.07.070.A. Type 3 watercourses require a standard buffer of 35 feet from the ordinary high water per MICC 19.070.B.1. This standard buffer can be reduced to a minimum of 25 feet with the implementation of a buffer enhancement plan that increases the functions of the riparian corridor over existing conditions per MICC 19.07.070.B.2.

# 2.0 PROPOSED PROJECT

The standard 35-foot stream buffer currently extends to the western edge of the existing residence. The proposed project consists of the re-development and expansion of the existing residence. As part of the expansion, the 35-foot standard buffer would be reduced to 25 feet. The area proposed for buffer reduction currently consists of an existing patio, deck, and stairs and does not provide any functional benefit to the off-site stream. Since no new structure area would be added within the minimum 25-foot buffer and no native vegetation would be removed as part of the house addition, there would be no loss of stream buffer function from the expansion project.

## Stormwater Conveyance and Outfall

It is my understanding that the City of Mercer Island is requiring that the stormwater outfall for the project be installed immediately adjacent the stream. Based on the plan prepared by the drainage engineer, the outfall would be installed off-site within an area vegetated with Himalayan blackberry, snowberry, and English ivy. Following installation of the outfall, the small area of temporary disturbance would be restored with native vegetation.

## 3.0 PROPOSED BUFFER MITIGATION

Although there would be no loss of buffer function as part of the house project, a mitigation planting plan has been prepared to plant native shrubs within the maintained yard along the west property line. It is my understanding that additional native vegetation is also proposed as part of the overall landscape design for the project. Implementation of the buffer enhancement plan would increase the habitat value of the buffer over current conditions.

Due to the small size of the project it does not appear that long-term performance monitoring should be required.

## 3.1 Maintenance

Maintenance should be conducted on a routine, year-round basis. Contingency measures and remedial action on the site shall be implemented on an as-needed basis at the direction of the consultant or the owner. Tall grasses and weeds shall be removed at the base of plants to prevent engulfment. Weed control should be performed by hand removal.

Kevin Sutton January 28, 2019 Page 3

#### 3.2 Contingency Plan

All dead plants will be replaced with the same species or an approved substitute species. Plant material shall meet the same specifications as originally-installed material. Replanting will not occur until after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.). Replanting shall be completed under the direction of the consultant, City of Mercer Island, or the owner.

#### 3.3 As-built Plan

Following completion of construction activities, an as-built plan for the enhancement area will be provided to the City of Mercer Island. The plan will identify and describe any changes in relation to the original approved plan.

If you have any questions, please give me a call.

Sincerely,

ALTMANN OLIVER ASSOCIATES, LLC

John altman

John Altmann Ecologist